

ES&H manual

Environment, Safety, and Health

Volume III

Part 33: Ecological and Cultural Resources

Document 33.4 Cultural and Paleontological Resources

Recommended for approval by the ES&H Working Group

Approved by: Robert W. Kuckuck
Deputy Director for Operations

New document or new requirements

Approval date: September 22, 1999

Editorial update: January 20, 2004

DISCLAIMER

This document was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor the University of California nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or the University of California. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or the University of California, and shall not be used for advertising or product endorsement purposes.

This work performed under the auspices of the U.S. Department of Energy by University of California Lawrence Livermore National Laboratory under Contract W-7405-ENG-48

33.4

Cultural and Paleontological Resources***Contents**

1.0	Introduction	1
1.1	Regulatory Summary	1
2.0	Applicability to LLNL Activities	2
3.0	Responsibilities.....	2
4.0	Process for Compliance	3
5.0	Work Standards.....	5
5.1	Work Smart Standards	5
5.2	Other Requirements.....	6
6.0	Resources for More Information.....	6
6.1	LLNL Contacts	6

Figure

Figure 1.	Cultural and paleontological resource compliance process.	4
-----------	--	---

* Editorial revision

33.4

Cultural and Paleontological Resources

1.0 Introduction

Cultural resources are protected under several state and federal laws. These laws were enacted to ensure consideration of historic values and to protect significant resources from destruction or theft. The major federal laws include: the National Historic Preservation Act (NHPA), Archaeological Resources Protection Act (ARPA), the Native American Graves Protection and Repatriation Act (NAGPRA), and the American Indian Religious Freedom Act of 1978 (AIRFA). State-level cultural resource protection is regulated through the provisions of Appendix K of the California Environmental Quality Act (CEQA). Paleontological resource protection is regulated through the 1906 Antiquities Act.

If you are planning a project that will involve construction or ground disturbance, notifying the LLNL archaeologist within the Operations & Regulatory Affairs Division (ORAD) early in the planning stage will help ensure that project activities will not be delayed by the cultural resource protection compliance process.

During the compliance process, every effort is made to locate surface cultural resource deposits. However, it is possible that subsurface deposits may be unearthed during construction activities. Mitigation Measures 4.1.1 and 4.2.1 of the 1992 Environmental Impact Statement/Environmental Impact Report (EIS/EIR) require that these deposits be reported to the LLNL ORAD archaeologist immediately. Work in the area of the find should be halted until the archaeologist assesses the discovery. Artifacts are protected under the ARPA; fossils are protected under the Antiquities Act. Such resources may not be collected or defaced.

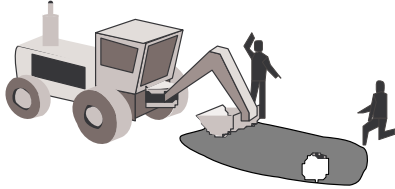
1.1 Regulatory Summary

The National Historic Preservation Act (NHPA), as amended through 1992, contains two primary sections that apply to federally operated and funded installations such as LLNL: Sections 110 and 106.

Section 110 sets forth the broad affirmative responsibilities for balancing agency missions with cultural values. Its purpose is to ensure that historic preservation is fully integrated into federal agency programs.

Section 106 requires federal agencies to take into account the effects their projects may have on "historic properties" (cultural resources), and they must allow a reasonable time period for the Advisory Council on Historic Preservation (the Council) to

comment. The Section 106 regulations (36 CFR 800, Protection of Historic and Cultural Properties) outline a five-step review process that is conducted on a project-by-project basis. The five steps are the following:



- Identify and evaluate historic properties.
- Assess project effects.
- Consult on mitigation measures.
- Obtain Council comment.
- Proceed with project.

During most project reviews, the State Historic Preservation Officer (SHPO) represents the Council.

The California Environmental Quality Act (CEQA), Appendix K, outlines a project-by-project historic property review process for state agencies similar to the Federal Section 106 process described above.

If non-human bones or fossils are found, the Antiquities Act regulates the protection or excavation of the resource. A permit to excavate may be required through the U.S. Department of the Interior (DOI). The Environmental Evaluations Group (EEG) within ORAD will coordinate activities that may need to be implemented should paleontological resources be identified. (See Section 4.0.)

2.0 Applicability to LLNL Activities

Each project that involves construction or ground-disturbing activities (including drilling) must be evaluated to ensure that it will not affect significant historic, prehistoric, or paleontological sites. At Site 300, 29 sites (seven prehistoric, 21 historic, and one with elements of each) and several paleontological resource sites have been discovered to date. At the LLNL main site, the World War II-era buildings themselves may be eligible for the National Register of Historic Places; however, this determination has not yet been made. One historic resource site and several paleontological resource sites have been identified at the main site.

3.0 Responsibilities

It is the responsibility of each Responsible Individual to notify an ORAD archaeologist, who will initiate a cultural resources investigation of the project site and notify the DOE, SHPO, and/or the DOI at the appropriate time.

4.0 Process for Compliance

Notify an LLNL ORAD archaeologist early in the project planning stage. Plant Engineering has a soil excavation, grading, and/or drilling permit process in place for all such Site 300 projects that may involve surface disturbance and for main site projects in certain sensitive areas, such as the buffer zones and near the arroyos. The archaeologist reviews the Site 300-related permit applications as another mechanism to ensure that proposed projects that could impact sensitive cultural resources are identified before the project starts. Because the main site does not contain ground surfaces that are undisturbed or have not been previously surveyed for the presence of cultural/paleontological resources, main site related permits are not reviewed by the archaeologist.

Then the archaeologist will check to see whether the project site has been surveyed and, if not, will survey the site, as appropriate. He or she will also prepare the necessary NHPA documentation and notify the DOE and/or SHPO.

If no sites are discovered during the survey, the project will be notified by the ORAD archeologist that it may proceed (pending other environmental and regulatory approvals). If sites are discovered, what happens next depends on the type and significance of the site and whether or not the site will be affected by the project. Figure 13-1 shows the process for complying with cultural resource laws at LLNL. If a significant site is discovered, appropriate mitigation measures will be developed in consultation with DOE, SHPO, and/or DOI and other interested parties.

If, during construction or other activities on a project, anyone discovers bones, artifacts, antiquities, or (most especially) human remains, stop work immediately and notify an LLNL ORAD archaeologist. The archaeologist will investigate the site. Major discoveries may necessitate more comprehensive investigation, and perhaps relocation of the project. If bones are found and determined not to be of human origin (i.e., paleontological resources), ORAD will notify the UC Paleontology Museum staff, who will then identify and assess the importance of the find. In consultation with the DOI, DOE will then determine whether to either (a) seek a permit from the DOI to excavate the find or (b) preserve the resource in place. Under no circumstances may anyone remove or disturb any artifacts or remains. Such removal is subject to substantial civil and/or criminal penalties under several laws.

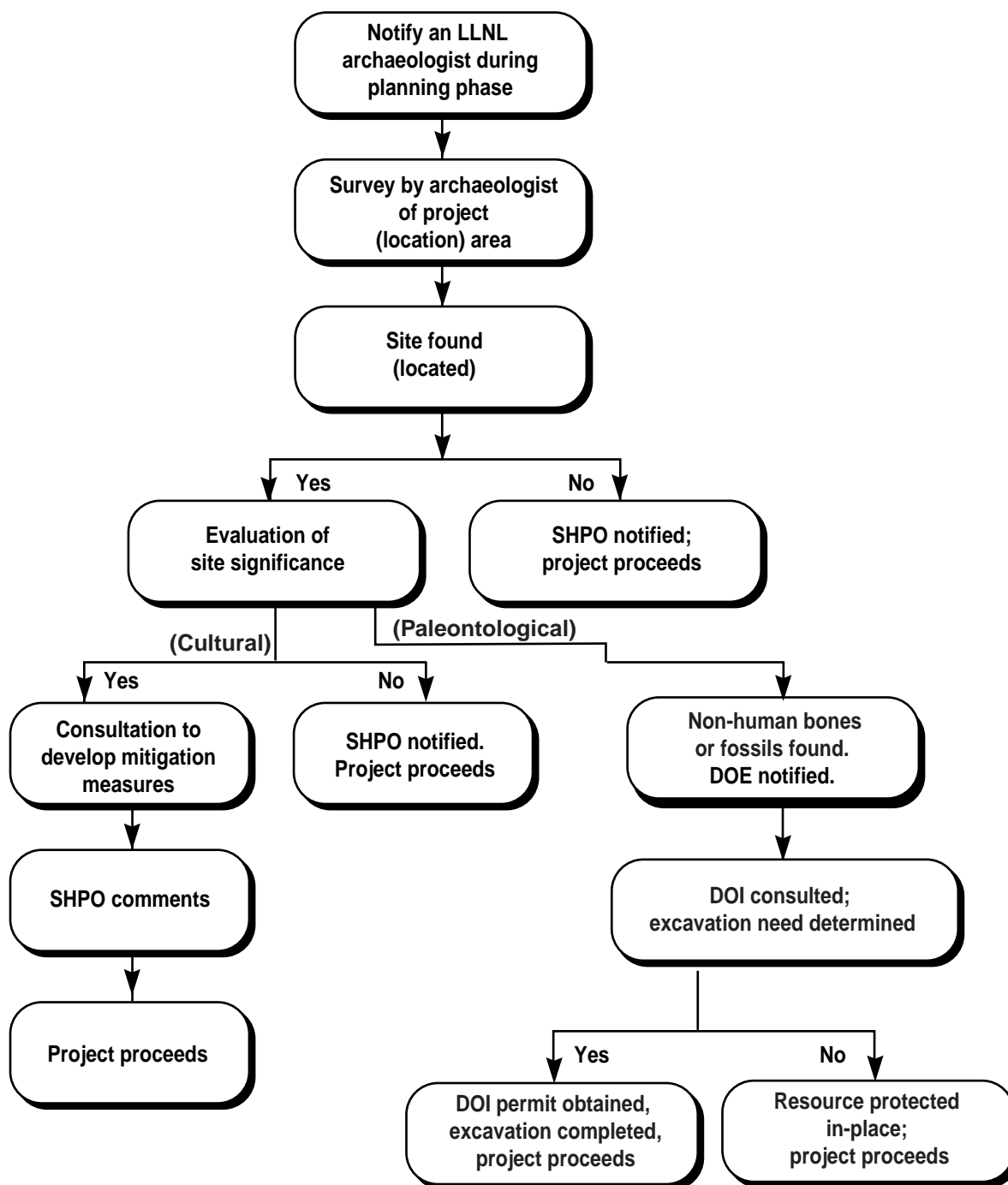


Figure 1. Cultural and paleontological resource compliance process.

5.0 Work Standards

5.1 Work Smart Standards

- | 36 CFR 60, National Register of Historic Places [criteria for listing, DOE takes Advisory Council comments into account before impacting property - Sect. 106]
- | 36 CFR 63, Determinations of Eligibility for Inclusion in the National Register of Historic Places NR [for Federal Agencies]
- | 36 CFR 68, The Secretary of the Interior's Standards for the Treatment of Historic Properties
- 36 CFR 79, Curation of Federally-owned and Administered Archeological Collections
- 36 CFR 800, Protection of Historic and Cultural Properties
- 43 CFR 3, Preservation of American Antiquities
- 43 CFR 7, Protection of Archeological Resources
- 16 USC §§ 432-433, Antiquities Act of 1906
- | 16 USC § 469a-1, Threat of Irreparable Loss or Destruction of Significant Scientific, Prehistorical, Historical or Archeological Data by Federal Construction Projects; Notice to Secretary of the Interior; Survey; Recovery, Preservation, and Protection of Data
- 16 USC § 470f, Effect of Federal Undertakings Upon Property Listed in National Register; Comment by Advisory Council on Historic Preservation
- 16 USC § 470h-2, Historic Properties Owned or Controlled by Federal Agencies
- 16 USC § 470h-3, Lease or Exchange of Historic Property
- 16 USC § 470w-3, Access to Information
- 16 USC § 470cc Excavation and Removal
- 16 USC § 470ee Prohibited Acts and Criminal Penalties
- 16 USC § 470ff, Civil Penalties
- 16 USC § 470hh, Confidentiality of Information Concerning Nature and Location of Archaeological Resources
- 25 USC § 3001-3005, Native American Graves Protection and Repatriation Act of 1990
- | 42 USC § 1996, American Indian Religious Freedom Act

5.2 Other Requirements

California Environmental Quality Act (CEQA), Appendix K (1983)

Executive Order 11593 (1971), Protection and Enhancement of the Cultural Environment

Federal Aid to Highways Act (1956 & 1958)

Final Environmental Impact Statement and Environmental Impact Report for Continued Operation of Lawrence Livermore National Laboratory and Sandia National Laboratories, Livermore, August 1992; DOE/EIS 0157, UC EIR SCH #90030847 (1992 EIS/EIR), and its January 21, 1993 DOE Record of Decision (58FR6268)

Health and Safety Code Section 7050.5 (added 1982)

Historic Sites, Buildings, and Antiquities Act, as amended. 16 U.S.C. 461–467 (Public Law 74-292)

National Historic Preservation Act Amendments of 1980, Public Law 96-515

National Historic Preservation Act Amendments of 1992, Public Law 102-575

NEPA of 1969. 42 U.S.C. 4321-4361; 40 CFR 1500-1508, 10 CFR 1021; Executive Order 11514, as amended by Executive Order 11991; (Public Law 91-190). DOE NEPA Regulation/Rule: 57FR15122, April 1992

Reservoir Salvage Act of 1960

6.0 Resources for More Information

6.1 LLNL Contacts

If you have any questions or need assistance, contact an LLNL archaeologist in ORAD.